

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,852	04/02/2001	Simon Jacobs	500744.03	9969
27076	27076 7590 10/24/2005		EXAMINER	
DORSEY &	WHITNEY LLP	VAN DOREN, BETH		
INTELLECT	UAL PROPERTY DEPA	ARTMENT		
SUITE 3400			ART UNIT	PAPER NUMBER
1420 FIFTH AVENUE			3623	
SEATTLE, V	VA 98101			_

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		09/824,852	JACOBS ET AL.				
		Examiner	Art Unit				
		Beth Van Doren	3623				
Period fo	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠	Responsive to communication(s) filed on 22 Au	igust 2005.					
3)[Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
4)⊠	4)⊠ Claim(s) <u>1-36,38-60 and 62-81</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-36,38-60 and 62-81</u> is/are rejected.							
7)	7) Claim(s) is/are objected to.						
8)□	8) Claim(s) are subject to restriction and/or election requirement.						
Applicati	on Papers	,					
9) The specification is objected to by the Examiner.							
10)[10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	nder 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
	1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4)					
3) 🔀 Infom	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date 20050922, 20050822.		atent Application (PTO-152)				

Application/Control Number: 09/824,852 Page 2

Art Unit: 3623

DETAILED ACTION

1. The following is a final office action in response to communications received 08/22/2005. Claims 37 and 61 have been cancelled. Claims 1, 11, 21, 34, and 58 have been amended. Claims 1-36, 38-60, and 62-81 are now pending in this application.

Examiner note

2. Examiner acknowledges the preliminary amendment filed 07/13/01, as noted in the previous office action. This preliminary amendment included amendments to the specification, claims, and abstract.

Response to Amendment

- 3. Applicant's amendments to claims 11 and 58 are sufficient to overcome the 35 USC § 102, second paragraph, rejections set forth in the previous office action.
- 4. Applicant's amendments to claims 1, 24, and 34 are sufficient to overcome the 35 USC § 101 rejections set forth in the previous office action.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-15, 18-23, 26, 27, 29, 32-50, 53-74, and 77-81 are rejected under 35 U.S.C. 102(b) as being anticipated by MDSI Mobile Data Solutions (www.mdsi-advantex.com).

6. As per claim 1, MDSI Mobile Data Solutions teaches a computer-implemented method for scheduling an order to a mobile service representative, the method comprising:

Art Unit: 3623

negotiating a reservation to perform an order for a customer against a schedule (See page 3, section 1, and page 4, sections 2-3, wherein the reservation is negotiated);

Page 3

adding a reservation, wherein adding a reservation includes identifying a duration, a priority, a location, an appointment window, a mobile service representative, a bumping indicator, and an aggregation indicator (See page 3, page 4, sections 2-3, and page 5, sections 2-3, which disclose these criteria);

booking the order having a priority to a shift of a mobile service representative (See page 3, sections 1-2, and page 4, wherein the service order is booked to a schedule of a mobile worker); and

optimizing periodically the shift of the mobile service representative (See page 3, section 1, and page 4, sections 2-3, wherein the shifts are rebalanced periodically).

- 7. As per claim 2, MDSI Mobile Data Solutions teaches configuring a constraint set, wherein the act of configuring allows a user to modify the constraint set so as to control the way in which orders are assigned to a mobile service representative (See page 4, sections 2-3, wherein the system has a set including priority, skills, etc. that is used to assign service orders).
- 8. As per claim 3, MDSI Mobile Data Solutions wherein negotiating includes using a window over the schedule, wherein the window defines a set of shifts in the schedule that can be booked by the act of booking (See page 4, sections 2-3, and page 5, sections 2-3, wherein a window is used to view the availability of the mobile workers).
- 9. As per claim 4, MDSI Mobile Data Solutions discloses wherein negotiating includes negotiating an appointment window for the order so as to allow the mobile service representative

Art Unit: 3623

Page 4

to begin the performance of the order within the time frame of the appointment window (See page 4, sections 2-3, and page 5, sections 2-5, which discusses performance of the service order).

- 10. As per claim 5, MDSI Mobile Data Solutions discloses bumping an order, which has a lower priority, for another order, which has a higher priority (See page 3, section 2, page 4, sections 1-3, wherein the service orders are rebalanced based on priority and emergencies).
- 11. As per claim 8, MDSI Mobile Data Solutions teaches wherein optimizing includes optimizing a single shift of a mobile service representative so as to shorten travel time between orders booked in the single shift (See page 4, section 3, and page 5, sections 2-3, wherein mobile workers are assigned as close to their location as possible).
- 12. As per claim 9, MDSI Mobile Data Solutions discloses wherein optimizing includes optimizing at least one pair of shifts, wherein optimizing is selected from a group consisting of swapping orders between the at least one pair of shifts and reassigning orders between the at least one pair of shifts (See page 4, sections 2-3, and page 5, sections 2-3, wherein the dispatcher rebalances the schedule).
- 13. As per claim 10, MDSI Mobile Data Solutions teaches wherein booking includes booking the order to a shift of the mobile service representative if the mobile service representative has the set of skills and the set of equipment (See page 4, sections 2-3, which discusses criteria for booking a mobile worker).
- 14. Claims 11-15 and 18-20 recite equivalent limitations to claims 1-5 and 8-10, respectively, and are therefore rejected using the same art and rationale as applied above.

15. As per claim 21, MDSI Mobile Data Solutions discloses a computer-implemented scheduling system for a dispatching environment having a scheduling engine for scheduling mobile service representative, the scheduling engine comprising:

a negotiator operable to negotiate an appointment window to perform an order, the order defined by a data structure that includes at least one of an appointment window, a duration, a priority, a location, and a set of skills required to carry out the order, and further includes at least one of a bumping indicator, and an aggregation indicator (See page 3, page 4, sections 2-3, and page 5, sections 2-3, which discloses at least a location and an aggregation indicator. See page 3, section 1, and page 4, sections 2-3, wherein the reservation is negotiated);

an assigner operable to assign the order to a shift of a mobile service representative (See page 3, sections 1-2, page 4, wherein the service order is booked to a schedule of a mobile worker); and

an optimizer operable to optimize dynamically at least one shift so as to enhance the scheduling system in accordance with a predetermined set of business objectives (See page 3, section 1, and page 4, sections 2-3, wherein the shifts are rebalanced periodically).

- 16. As per claim 22, MDSI Mobile Data Solutions teaches wherein the order is defined by a data structure that includes an appointment window, a duration, a priority, a location, and a set of skills required to carry out the order, and wherein the data structure resides on a computer media (See page 1, section 1, page 3, page 4, sections 2-3, and page 5, section 2, which disclose duration, priority, location, etc.).
- 17. As per claim 23, MDSI Mobile Data Solutions teaches wherein the mobile service representative is defined by a data structure that includes a set of skills that the mobile service

Art Unit: 3623

representative possesses and the equipment that the mobile service representative possesses, and

wherein the data structure resides on a computer media (See page 4, sections 2-3, which

Page 6

discusses criteria for booking a mobile worker).

18. As per claim 26, MDSI Mobile Data Solutions teaches wherein the appointment window includes an identifier, a start time, and an end time, and wherein the appointment window is visible to the negotiator (See page 3, section 1, page 4, sections 2-3, and page 5, sections 2-3, which discuss an appointment window visible to the negotiator).

- 19. As per claim 27, MDSI Mobile Data Solutions teaches wherein the order includes a predetermined level of priority, wherein the predetermined level of priority of the order determines whether the order will be bumped by another order having a higher level of priority (See page 3, section2, page 4, sections 1 and 3, discussing priority of an order in scheduling).
- 20. As per claim 29, MDSI Mobile Data Solutions teaches wherein the assigner includes an assignment filter that finds a set of shifts that is suitable to perform the order, wherein the assignment filters returns the set of shifts (See page 4, sections 2-3, which discusses automatic assignment).
- 21. As per claim 32, MDSI Mobile Data Solutions teaches wherein the optimizer includes an optimizing filter, wherein the optimizing filter finds a shift into which a reservation fits, with the purpose of better satisfying the optimization objectives (See page 3, sections 1-2, and page 4, wherein the shifts are optimized automatically).
- 22. As per claim 33, MDSI Mobile Data Solutions teaches wherein the optimizer includes an optimization objective component having a set of optimization objectives, wherein the optimization objective component determines the degree to which the set of optimization

Art Unit: 3623

objectives are satisfied if the optimizer were to optimize a shift or a pair of shifts (See page 3, sections 1-2, and page 4, wherein the shifts are optimized automatically).

23. As per claim 34, MDSI Mobile Data Solutions teaches a computer-implemented method for scheduling mobile service representatives, the method comprising:

negotiating an appointment window for booking a reservation (See page 3, section 1, and page 4, sections 2-3, wherein the reservation is negotiated);

adding a reservation, wherein adding a reservation includes identifying a duration, a priority, a location, an appointment window, a mobile service representative, a bumping indicator, and an aggregation indicator (See page 3, page 4, sections 2-3, and page 5, sections 2-3, which disclose these criteria);

assigning the reservation to a shift of a mobile service representative (See page 3, sections 1-2, and page 4, wherein the order is booked to a schedule of a mobile worker); and optimizing periodically the shift of the mobile service representative while the acts of negotiating and assigning are executing (See page 3, section 1, and page 4, sections 2-3, wherein the shifts are rebalanced periodically).

24. As per claim 35, MDSI Mobile Data Solutions discloses adding a mobile service representative, wherein adding the mobile service representative includes identifying a working area of the mobile service representative, a set of skills of the mobile service representative, and a set of equipment types that is possessed by the mobile service representative (See page 4, sections 2-3, which considers attributes of the mobile worker in the assignment).

Art Unit: 3623

25. As per claim 38, MDSI Mobile Data Solutions teaches finding a list of appointment

windows for the act of negotiating (See page 3, sections 1-2, page 4, and page 5, section 3, which

Page 8

discusses appointment windows).

26. As per claim 39, MDSI Mobile Data Solutions discloses assigning forcibly a reservation

when the act of assigning the reservation has failed (See page 4, section 3, which discusses the

dispatcher overriding or manually entering a reservation).

27. As per claim 40, MDSI Mobile Data Solutions teaches removing an assignment of a

reservation (See page 5, section 4, wherein an assignment is removed).

28. As per claim 41, MDSI Mobile Data Solutions teaches canceling a reservation (See page

5, section 4, wherein the reservation is canceled when no one is available).

29. As per claim 42, MDSI Mobile Data Solutions teaches completing a reservation so as to

inhibit the reservation from being bumped, aggregated, or moved to another shift (See page 3,

section 2, page 4, sections 1 and 3, wherein an emergency reservation cannot be bumped).

30. As per claims 43 and 44, MDSI Mobile Data Solutions teaches reassigning forcibly a

reservation (See page 4, section 3, wherein the dispatcher rebalances the assignments manually).

31. As per claim 45, MDSI Mobile Data Solutions teaches assigning a bumped or a yanked

reservation (See page 4, section 3, wherein a bumped reservation is reassigned when rebalancing

occurs).

32. As per claim 46, MDSI Mobile Data Solutions teaches setting at least one property from

a set of properties of a reservation (See page 4, which sets information about the appointment).

33. As per claim 47, MDSI Mobile Data Solutions teaches modifying a mobile service

representative (See page 4, section 3, wherein the representative's assignments are changed).

Application/Control Number: 09/824,852 Page 9

Art Unit: 3623

34. As per claim 48, MDSI Mobile Data Solutions teaches deleting a mobile service representative (See page 4, sections 2-3, wherein when an order is reassigned, the worker is deleted from the task).

- 35. As per claims 49 and 50, MDSI Mobile Data Solutions teaches modifying forcibly a shift (See page 4, section 3, wherein the representative's assignments are changed).
- 36. As per claim 53, MDSI Mobile Data Solutions teaches notifying a subscriber when a reservation event occurs (See page 5, section 4, wherein the customer is notified via call ahead).
- 37. As per claim 54, MDSI Mobile Data Solutions teaches getting reservation assignment information (See page 4, section 2-3, wherein the system receives the assignment information).
- 38. As per claims 55 and 56, MDSI Mobile Data Solutions teaches getting mobile service representative assignment information (See page 1, section 1, page 3, page 4, section 1, page 5, section 1, page 6, wherein the assignment is communicated to the mobile worker).
- 39. As per claim 57, MDSI Mobile Data Solutions teaches confirming a reservation (See page 5, section 4, wherein the reservation is confirmed).
- 40. Claims 58-60, 62-74, and 77-81 recite equivalent limitations to claims 34-36, 38-50, and 53-57, respectively, and are therefore rejected using the same art and rationale as applied above.

Claim Rejections - 35 USC § 103

- 41. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6, 16, 24, 25, 28, 30, 31, 51, 52, 75, and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over MDSI Mobile Data Solutions (www.mds-advantex.com) and Lesaint et al. (U.S. 6,578,005).

42. As per claim 6, MDSI Mobile Data Solutions discloses a priority of an order (See page 3, section 2, and page 4, which discuss priorities of tasks). However, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses escalating the priority of an order over time when the order has not been performed by the mobile service representative (See column 12, sections 50-67, which discuss priority of earliest first).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the tasks having associated priorities. MDSI Mobile Data Solutions specifically discusses priorities of appointments, rebalancing schedules to meet commitments, and the consequences of missed appointments. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to escalate the priority of an order over time to increase the standards of service offered by the service organization by ensuring tasks are completed in a timely manner. See page 1, page 4, sections 2-3, and page 5, section 5, which discuss priorities and the consequence of missed appointments and time commitments.

43. As per claim 24, MDSI Mobile Data Solutions teaches assigning orders to mobile service representatives' shifts using constraints of the order and constraints of the mobile representative (See page 4, sections 2-3). However MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses a shift being defined by a data structure that includes a shift start date and start time, a shift end date and end time, a set of break start dates and start time, a set of

break end dates and end times, and a starting location and an ending location, and wherein the data structure resides on a computer media (See column 11, lines 35-65, and column 12, lines 1-11 and 50-67, column 27, lines 30-47, which discuss shift constraints such as these).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the assignment of tasks to workers considering availability. MDSI Mobile Data Solutions further discusses considering travel time, service area, etc. when assigning workers to orders. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include specific times associated with shift events in order to more efficiently match workers to orders based on time commitments and availability, thus increasing the standards of service offered. See page 1, page 4, sections 2-3, and page 5, section 5.

44. As per claim 25, MDSI Mobile Data Solutions teaches wherein the assigner accounts for the travel time of the mobile service representative of the mobile service representative in assigning the order to the shift of the mobile service representative (See page 4, sections 2-3, and page 5, sections 2-3, wherein the system has a set including travel time). However, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses break time (See column 11, lines 35-65, and column 12, lines 1-11, which discusses assigning orders with a consideration of a worker's breaks).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the assignment of tasks to workers considering availability. Workers' having required breaks throughout shifts is old and well known in the labor industry. Therefore, it would have been obvious to one of ordinary skill in

the art at the time of the invention to include specific times associated with shift events in order to more efficiently schedule workers based on the workers' availability, thus increasing the standards of service offered. See page 1, page 4, sections 2-3, and page 5, section 5.

45. As per claim 28, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. teaches wherein the order includes several orders that have been aggregated (See column 12, lines 30-50, column 14, lines 15-25, wherein the order is made up of multiple orders).

It is old and well known in the service industry that some tasks/orders would require more than one worker to complete the order. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include scheduling aggregate orders in order to more efficiently meet the needs of the person placing the order.

46. As per claim 36, MDSI Mobile Data Solutions teaches adding orders to mobile service representatives' shifts using constraints of the order and constraints of the mobile representative (See page 4, sections 2-3). However MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses adding a shift, wherein adding a shift includes identifying a mobile service representative to be associated with the shift, a start time, an end time, and a set of breaks (See column 11, lines 35-65, and column 12, lines 1-11 and 50-67, column 27, lines 30-47, which discusses assigning orders with a worker with consideration of a worker's breaks, a start time, and an end time).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the assignment of tasks to workers considering availability. MDSI Mobile Data Solutions further discusses considering travel time, service area, etc. when assigning workers to orders. Therefore, it would have been obvious to

one of ordinary skill in the art at the time of the invention to include specific times associated with shift events in order to more efficiently match workers to orders based on time commitments and availability, thus increasing the standards of service offered. See page 1, page 4, sections 2-3, and page 5, section 5.

As per claim 30, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses an assignment error component that returns a set of reasons when an order cannot be assigned, wherein the assignment error component distinguishes between why the order cannot be assigned to a mobile service representative and why the order cannot be assigned to one of the shifts of the mobile service representative (See column 8, lines 5-20 and 35-62, wherein an error occurs and is reported).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry. MDSI Mobile Data Solutions further discusses missed appointments and assignments being made by recommendations being reported to a dispatcher by the system and needing approval. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to report error messages when assignments cannot occur in order to increase the standards of service by ensuring that orders are assigned to workers and therefore completed. See page 1, page 4, sections 2-3, and page 5, section 5.

48. As per claim 31, MDSI Mobile Data Solutions teaches a travel time component that considers travel time when assigning shifts to mobile representatives (see page 4, section 2-3, and page 5, sections 2-3, wherein the location of the worker is considered when the task is assigned). However, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al.

Art Unit: 3623

discloses calculating the travel time between the start of a shift to the first order assigned to the shift and the travel time between two orders, and the travel time between the last order assigned to the shift and the end of the shift (See column 7, lines 48-65, column 9, lines 5-15, column 13, lines 38-65, column 18, lines 25-30, column 25, lines 20-40, and column 27, lines 30-47, wherein travel time is calculated in such a manner).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the assignment of tasks to workers considering availability. MDSI Mobile Data Solutions further discusses considering travel time, service area, etc. when assigning workers to orders. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include specific times associated with shift events in order to more efficiently match workers to orders based on time commitments and availability, thus increasing the standards of service offered. See page 1, page 4, sections 2-3, and page 5, section 5.

49. As per claims 51 and 52, MDSI Mobile Data Solutions teaches rebalancing a schedule and removing a shift from the schedule of one worker and placing the shift on another schedule (See page 4). However, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses deleting forcibly a shift (See column 7, lines 1-15, column 31, lines 44-60, wherein a shift is removed).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the assignment of tasks to workers considering availability. It is old and well known in the labor industry that workers call out sick.

MDSI Mobile Data Solutions discusses rebalancing schedules and communicating information to

remote workers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include deleting a shift of the user in order to increase the dynamics of the system by allowing the system to compensate for all possible changes. See pages 1 and 3.

- 50. Claims 16, 75, and 76 recite equivalent limitations to claims 6, 51, and 52, respectively, and are therefore rejected using the same art and rationale as applied above.
- 51. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over MDSI Mobile Data Solutions (www.mds-advantex.com) and Kocur (U.S. 5,913,201).
- As per claim 7, MDSI Mobile Data Solutions teaches scheduling an order with a mobile service representative (See page 3, sections 1-2, page 4, wherein the service order is booked to a schedule). However, MDSI Mobile Data Solutions does not expressly disclose and Kocur discloses splitting an order to a set of orders when the performance of the order requires a number of days to perform the order (See column 3, lines 24-35, wherein an order is performed over multiple days).

Both MDSI Mobile Data Solutions and Kocur disclose computerized system that assign workers to orders. It is old and well known in the service industry that not all service requests are compliable in a single day and require multiple days of work. Therefore, since MDSI Mobile Data Solutions discloses assigning field service workers to requests of a customer based on the requirements of the customer, it would have been obvious to one of ordinary skill in the art at the time of the invention to allow for the assignment of an order over multiple days in order to order to more efficiently meet the needs of the person placing the order.

53. Claim 17 recites equivalent limitations to claim 7 and is therefore rejected using the same art and rationale as applied above.

Response to Arguments

54. Applicant's arguments with regards to the rejections based on MDSI Mobile Data Solutions (www.mdsi-advantex.com) have been fully considered, but they are not persuasive. In the remarks, Applicant argues that MDSI Mobile Data Solutions does not teach or suggest (1) adding a reservation, wherein adding a reservation includes identifying a duration, a priority, a location, an appointment window, a mobile service representative, a bumping indicator, and an aggregation indicator or (2) an order defined by a data structure that includes at least one of an appointment window, a duration, a priority, a location, and a set of skills required to carry out the order, and further includes at least one of a bumping indicator, and an aggregation indicator.

In response to argument (1), Examiner respectfully disagrees. MDSI Mobile Data Solutions discusses identifying the type of request (routine verse emergency, wherein emergencies are given priority), skills required, travel time and location, labor costs, available resources (i.e. aggregation indicator or availability), an assigned representative, an appointment window (such as 8 am to 10 am), order completion time, and a bumping indicator (a call ahead feature), all of which are used to add and maintain a reservation for field service. See at least page 3, page 4, sections 2-3, and page 5, sections 2-3.

In response to argument (2), Examiner first points out that the limitation states the order is defined by a data structure that includes at least one of an appointment window, a duration, a priority, a location, and a set of skills required to carry out the order, and further includes at least

one of a bumping indicator, and an aggregation indicator. Therefore, the order being defined by only the data of priority and aggregation indicator is sufficient to satisfy this limitation. MDSI Mobile Data Solutions discusses that the data associated with the order is entered and stored in the system via network application. Since a data structure is an organization of information in memory, and since MDSI Mobile Data Solutions discusses storing data in memory of the system, MDSI Mobile Data Solutions does teach and suggest this limitation. See at least page 3, page 4, sections 2-3, and page 5, sections 2-3.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (571) 272-6737. The examiner can normally be reached on M-F, 8:30-5:00.

Application/Control Number: 09/824,852 Page 18

Art Unit: 3623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bvd

October 19, 2005

TARIQ R. HAFIZ

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 3600